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(54) Title: **DEAZAPURINE NUCLEOSIDE ANALOGS AND THEIR USE AS THERAPEUTIC AGENTS**

(57) Abstract: Methods, compositions, and uses for various deazapurine nucleoside libraries and library compounds are provided. Particularly preferred deazapurine nucleosides include 7-deazapurine nucleosides, 7-deaza-8-azapurine nucleosides, toyocamycin nucleoside analogs, 3-deazapurine nucleosides, and 9-deazapurine nucleosides, while preferred uses especially include use of such compounds as pharmacological, and particularly antiviral agents.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/01545

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07H 19/00; A01N 43/04; A61K, 31/70

US CL : 536/26.1, 26.11, 26.12, 26.13, 27.21, 27.6, 27.62, 28.5; 514/45, 46, 47, 48, 49

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 536/26.1, 26.11, 26.12, 26.13, 27.21, 27.6, 27.62, 28.5; 514/45, 46, 47, 48, 49

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EAST, STN (REGISTRY, CAPLUS, MEDLINE, BIOSIS)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X — Y	EP 0 576 227 A2 (BLI LILLY AND COMPANY) 29 December 1993 (29.12.1993)	1, 16, 21 2-4, 17-24
X — Y	CUI et al. Effect of Beth-Rnantiomeric and Racemic Nucleoside Analogues on Mitochondrial Functions in HepG2 Cells. Biochemical Pharmacology. 1996, Vol. 52, No.10, pages 1577-1584, see entire document.	1, 5, 21 2-4, 6-7, 22-24
X — Y	ILTZSCH et al. Structure-Activity Relationship for the Binding of Nucleoside Ligands to Adenosine Kinase From Toxoplasma Gondii. Biochemical Pharmacology. 1995, Vol. 49, No. 10, pages 1501-1512, see entire document.	1, 5, 8, 16 2-4, 6-7, 9-15, 17-24
X — Y	BHATTACHARYA et al. Synthesis and anti-DNA Viral Activities in Vitro of Certain 2, 4-Disubstituted-7-(2-deoxy-2-fluoro-B-D-arabinofuranosyl)pyrrolo[pyrimidine Nucleosides. Journal of Medicinal Chemistry. 1995, Vol. 38, pages 3957-3966, see entire document.	1, 21 2-4, 21-24

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## INTERNATIONAL SEARCH REPORT

## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X — Y	KRAWCZYK et al. Synthesis and Antiproliferative and Antiviral Activity of 2'-Deoxy-2-fluoroarabinofuranosyl Analogs of the Nucleoside Antibiotics Toyocamycin and Sangivamycin. Journal of Medicinal Chemistry. 1995, Vol. 38, pp. 4106-4114, see entire document.	1, 5, 21 2-4, 6-7, 22-24
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Y, P	WO 02/18404 A2 (F. HOFFMANN-LA ROCHE AG) 07 March 2002 (07.03.2002).	1-24